

Round Trip to Hell in a Flying Saucer: The Relationship between Conventional Christian and Paranormal Beliefs in the United States*

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In this paper we examine the relationship between conventional Christian and paranormal beliefs. Conventional Christian beliefs are those such as belief in Heaven, Hell, and the existence of God. Paranormal beliefs include belief in UFOs, astrology, haunting, communication with the dead, and Bigfoot. We test three hypotheses (deviance) (marginalization, small step, and compatibility) about the relationship between these two belief types with factor analysis and regression analysis. The data we use are from the Baylor Religion Survey, a national random sample collected by the Gallup Organization in fall 2005. The factor analysis results show that there are two well-defined spheres of supernatural beliefs, one conventional Christian and one paranormal. We find a net positive relationship between these two belief clusters. However, a test of the compatibility hypothesis shows that church attendance and religious tradition moderate the effects of conventional Christian beliefs on paranormal beliefs. We conclude with a discussion of the implications for theory and research.

Many people want to know if the space people are Christians. I would say they are better Christians than we are.

—UFO contactee George Adamski (1961)

Following a wave of flying saucer sightings in the late 1940s, dozens of so-called UFO contactees appeared in the U.S. religious marketplace

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(Melton 1995). George Adamski, Orfeo Angelucci, Howard Menger, George King, and others claimed to have met and interacted with the pilots of the flying saucers (cf. Adamski 1955, 1961; Angelucci 1955; Leslie and Adamski 1953; Menger 1959; King 1965). These tales shared many similarities. The aliens were typically described as human-like in appearance, inhabited planets within our solar system, such as Venus and Mars, and imparted a message of peace and “cosmic” understanding (Melton, et al. 1990; Melton 1995; Partridge 2003). Curiously, many contactee stories also included Christian themes and elements. Angelucci (1955) transcribes a conversation with Jesus in *The Secret of the Saucers*. Adamski (1955) and King (1965) both reported that Jesus was a space-man, incarnated on Earth to serve as an example to earthlings. Cecil Michael (1971) claimed that two space men took him on a tour of Hell, contained deep within the Earth in *Round Trip to Hell in a Flying Saucer*.¹

The contactee tales represented an attempt to merge Christian concepts of the supernatural with emergent paranormal (New Age beliefs). But are these different types of beliefs compatible? Will someone who believes in eternal life or the resurrection reject beliefs in flying saucers, ghosts, extrasensory perception (ESP), and the like? In this paper we utilize data from the Baylor Religion Survey (BRS) 2005, a random national survey of U.S. citizens to examine how Americans connect conventional Christian and paranormal beliefs.

CONVENTIONAL CHRISTIAN VERSUS PARANORMAL BELIEFS

The previous literature on the relationship between Christian supernatural beliefs and non-Christian, often called paranormal beliefs, is perhaps best described as noncohesive. Researchers use terms such as “New Age,” paranormal, occult, and supernatural to refer to beliefs in UFOs, ghosts, ESP telepathy, and the like (Tobacyk and Milford 1983). In this paper we will utilize the terms conventional Christian and paranormal. All supernatural beliefs, whether they be in Jesus, psychic phenomena, or the space brothers, are resistant to attempts at scientific proof and must rely upon the faith of the individual (Hines 1988; Gray 1991; Goode 2000). Certain supernatural beliefs, however, have the

¹Michael’s book appears to be spoofing the contactees of his day. However, even though the back cover clearly states the book to be a work of fiction, he is sometimes counted among the ranks of “genuine” contactees by believers.

advantage of widespread acceptance in a culture. By conventional Christian beliefs we refer to those supernatural phenomena that are associated with the dominant belief system in a culture. The United States is majority Christian. Therefore, belief in God, heaven and hell, the resurrection of Jesus, and the virgin birth are conventional. Other supernatural beliefs do not have the benefit of association with the mainstream religion, such as belief in psychic phenomena, ghosts, and UFOs. Any supernatural belief that is outside of the beliefs and doctrines of the dominant belief system of a culture would be considered “paranormal.”

We draw upon two developed theories in the literature that have been used to test and explain relationships between the sociodemographic characteristics of individuals and their propensity to believe in conventional Christian and paranormal beliefs. We briefly review these two theories, and the empirical results that tests of their core hypotheses have generated.² We then attempt to integrate these theories and this literature by drawing upon Iannacone’s (1992) concepts of stigma and sacrifice, and present a third hypothesis.

Deviance/Marginalization Hypothesis

According to Hirschi (1969), an individual’s social bond, or stake in conformity, will inhibit deviant behavior. To the extent that an individual is wedded to society’s conventions, deviant behaviors and beliefs become more risky. Stark and Bainbridge (1987) apply Hirschi’s theory to religion, arguing that a stake in conformity will reduce the appeal of cults and sects. In a Christian setting, Christian supernatural beliefs are normal, accepted, and expected. In this way, traditional religious beliefs and behaviors would constitute a stake in conformity just as an education, job, or marriage would.

One predominant sociological framework in the empirical literature used to address belief in the paranormal has been deprivation/marginalization theory [see Rice’s (2003) review]. Accordingly, members of those groups deprived of power in society are more likely to reject conventional belief systems and embrace alternatives (Wuthnow 1978; Rice 2003). Members of groups that are in power will avoid beliefs outside the supernatural mainstream because such beliefs are more likely

²These two theories are not exhaustive of all the approaches used to address the relationship between religion and the paranormal. We choose to limit the theoretical discussion to the two hypotheses presented because they are the two dominant themes in recent empirical research on this topic (see Mears and Ellison 2000; Orenstein 2002; Rice 2003; Bainbridge 2004; McKinnon 2003; Glendinning 2006).

to provoke a negative response. Those who profess a strong belief in UFOs, ghosts, and similar phenomena might be viewed as deviant, superstitious, and unsophisticated (Goode 2000). Bainbridge (2004:382) argues that conventional Christian denominations discourage participation with the supernatural and the occult. Thus, to the extent that a person is tightly bound to conventional beliefs, we should expect them to find paranormal beliefs risky and unattractive. Deviance theory and deprivation/marginalization theory both predict a negative relationship between conventional Christian and paranormal beliefs. Similarly, Orenstein (2002) argues that in the absence of religion, paranormal beliefs become a substitute for conventional religious beliefs. Hence,

Hypothesis 1: There is a negative relationship between conventional Christian and paranormal beliefs.

The Small Step Hypothesis

A competing hypothesis, the small step hypothesis, proposes that there is a positive relationship between these types of supernatural beliefs. According to Goode (2000), conventional supernatural beliefs (including conventional Christian beliefs) and classic supernatural beliefs share a spiritual orientation to the world. They both represent a rejection of materialism, are both at odds with conventional scientific thinking (Bainbridge 2004), and both place an emphasis on spiritualism. For materialists, there are no alternative planes of human existence. Existence is confined to the here and now. Materialists stress critical thinking and rational, logical, scientific explanations of all phenomena. As such, they are not likely to embrace spiritual beliefs (Krull and McKibben 2006).

Materialists reject appeals to a “higher order” or divine plan in order to explain the occurrence of events. Accordingly, materialists see “God [as] a concept invented by humans to solve perplexing and troubling problems of existence” (Goode 2000:181). Spiritualists, on the other hand, believe that the material world is a lower order of existence. They reject the concept of random events, and are likely to believe that events unfold as part of a cosmic or divine plan.

Second, both conventional Christian and paranormal supernatural beliefs are based on nonfalsifiable truth claims, or beliefs that cannot be challenged by scientific research. Goode’s (2000) point is that while not all believers in supernatural phenomena are spiritualists in the sense presented above, both conventional Christian and paranormal believers have more in common with each other than with materialists and their reliance on scientific standards. Since proponents of both conventional Christian and paranormal beliefs share a common

orientation toward spiritualism, it is likely that holders of one set of beliefs may also be drawn to the other.

Brown (1992) notes that New Age belief systems draw upon many religious traditions, including Eastern and Judeo-Christian beliefs. Extending this New Age argument to supernatural beliefs, it is reasonable to expect that those who hold paranormal supernatural beliefs might also report beliefs in Christian supernatural phenomena, since new movements often draw upon existing doctrine for beliefs and practices. In Wuthnow's (1978:71) analysis of the relationship between religious experiences and ESP beliefs, he concludes that "one kind of supernatural belief reinforces another." Or as Rice (2003:96) puts it, "it is a small step to move from believing in the devil and angels to believing in ghosts and aliens." Hence,

Hypothesis 2: There is a positive relationship between conventional Christian and paranormal supernatural beliefs.

Empirical Evidence

The empirical relationship between Christian and paranormal beliefs in the existing literature is inconclusive. Wuthnow (1978) and Hess (1993) argue that New Age beliefs and the standard Judeo-Christian theologies occupy independent spaces in the religious market. More specifically, Wuthnow (1978) argues that traditional religious beliefs decrease (but do not eliminate) tendencies to believe in and to experience ESP. His analysis demonstrates that Protestants are less likely to believe in or experience ESP than nonreligious, Eastern (mystical respondents). Stark and Bainbridge (1980) hypothesize that conventional Christian beliefs and paranormal beliefs do not overlap with each other. They found that paranormal beliefs tend to be strong in areas where traditional Christianity tends to be weak, and vice versa. Sjodin (2002) concludes that young Swedish people from the Bible Belt are less likely to agree with the paranormal statements than young people from other areas. Consequently, respondents who agreed with the statement "there is a personal God" are less likely to believe in paranormal phenomena. More recently, Krull and McKibben (2006) find that those with conventional Christian beliefs score low on paranormal beliefs.

Other studies show strong, positive relationships. Orenstein (2002) points out that greater traditional religious belief has a strong relationship with greater paranormal beliefs. Additionally, he failed to find that people belonging to "none" in religious affiliation are more likely to endorse New Age beliefs. Rudski (2003) and Goode (2000) also suggest that greater traditional religiosity is associated with greater

beliefs in paranormal or supernatural phenomena. More specifically, Goode (2000) found that greater fundamentalism is significantly related to greater beliefs in paranormal phenomena. By the same token, respondents who disagreed with religious beliefs are more likely to disagree with the paranormal phenomena. Accordingly, “respondents who believed in angels, heaven, divine creation, and the devil also believed the reality of extraterrestrial vehicles, ESP, astrology, lucky numbers, and King Tut’s curse” (Goode 2000:34).

There have also been several studies demonstrating no significant relationship between these constructs. For instance, Rice (2003) reports no significant relationship between the two types of beliefs. He concludes that the insignificant coefficients between them merely indicate the existence of various belief patterns. Sparks (2001) finds that people with higher church attendance tend to show greater endorsement of traditional religious beliefs, while those who watch paranormal TV programs were more likely to report paranormal beliefs. Using a nationwide sample of six Protestant denominations, Donahue (1993) does not find a significant relationship between classic paranormal beliefs and personal religiosity or satisfaction with his (her) congregation or denomination.

Finally, a number of studies have discussed potential nonlinear effects. Bainbridge (2004) proposes a potential curvilinear relationship between Christian and paranormal beliefs, a conclusion endorsed by Krull and McKibben (2006:280). Paranormal beliefs are strongest among those with no Christian beliefs and with the strongest Christian beliefs, and are weak among those with moderate Christian beliefs. McKinnon (2003) reanalyzes Orenstein’s (2002) data and finds that church attendance conditions the effects of Christian beliefs on paranormal beliefs. Glendinning (2006) finds a similar contextual effect in a Scottish sample. For nonattenders, Christian beliefs are strongly positively correlated with paranormal beliefs. As church attendance increases, Christian beliefs have a negative effect on paranormal beliefs.

Compatibility Hypothesis

We propose that many of the inconsistent findings in this literature can be reconciled by examining interactions between Christian conventional beliefs and measures of religiosity. The basic research question we pursue, what is the relationship between conventional Christian and paranormal beliefs, is a question of compatibility. Philosophically, conventional Christian and paranormal beliefs are compatible under the small step framework. Those who hold a spiritualist worldview are more prone to supernatural beliefs, be it conventional Christian or paranormal

(see Goode 2000; Bainbridge 2004). Because the beliefs are compatible, there are no serious social consequences for holding either set of beliefs.

In contrast, the marginalization (deviance) hypothesis implies that there are significant consequences for holding beliefs outside of the mainstream of religious dogma. Because there are consequences, the belief systems are not compatible. In particular, those who hold conventional Christian beliefs will not hold paranormal beliefs. In circumstances where the beliefs are compatible, there will be a positive relationship between conventional Christian and paranormal beliefs. In the situations where the beliefs are incompatible, there will be a negative relationship between conventional Christian and paranormal beliefs. In essence, we argue that religiosity measures such as church attendance, Biblical literalism, and belonging to an evangelical Protestant denomination will serve to moderate the effects of Christian beliefs on paranormal beliefs.

Iannaccone (1992, 1995, 1998) maintains that actors choose their religious activities rationally, and seek to minimize their risk through religious portfolio diversification (Durkin and Greeley 1991; Stark and McCann 1993). According to Iannaccone (1995), religious firms can manage risk in one of two ways: through collective production or through private production (diversification). In collective production, religious organizations set and enforce norms of behavior for members. Those who “cross of the line” are subject to sanctions. The enforcement of norms of stigma and sacrifice vary by institutional characteristics, especially the level of tension between the religious collective and mainstream secular culture (Stark and Bainbridge 1985).

The alternative to collective production is private production and portfolio diversification. Actors have access to a wide variety of religious activities. Risk is most efficiently reduced through diversification. In terms of religious portfolios, actors “hedge” by diversifying and consuming a variety of religious services. Actors do not face normative constraints from a well-organized collectivity, and are free to consume a variety of religious products, practices, and services (conventional Christian, paranormal, and so forth).

Risk reduction in religious consumption will affect the compatibility of conventional Christian and paranormal beliefs. In circumstances where tension is high, there will be low levels of compatibility between conventional Christian and paranormal beliefs. We expect two important religiosity measures to moderate the effects of conventional Christian beliefs on paranormal beliefs. First, church attendance is an extremely important (negative) predictor of paranormal beliefs (Rice 2003; McKinnon 2003; Glendinning 2006). Going to church often

reinforce the veracity and exclusiveness of conventional Christian beliefs, and the deceit of paranormal beliefs (Mears and Ellison 2000; Bainbridge 2004). Holding conventional Christian views but not practicing the faith via church attendance leaves one less exposed to religious tension (Stark and Bainbridge 1985). Among those exposed to lower levels of tension, it is expected that they will be more likely to diversify religious portfolios, and hence, to have a greater variety of religious beliefs (practices), such as the paranormal.

Second, having an evangelical Protestant religious affiliation makes an individual a member of a voluntary organization that seeks to keep secular culture at arm's length. This differs from mainline Protestantism, which has been more tolerant of secular culture and the variety of spiritual practices encumbered therein (Stark and Bainbridge 1985; MacDonald 1995; Sherkat and Wilson 1995; Steensland, et al. 2000). Therefore, in addition to church attendance, we expect religious tradition, especially being an evangelical Protestant, to moderate the effects of traditional Christian beliefs on paranormal beliefs. Hence,

Hypothesis 3: Religious tension will have a moderating effect on the compatibility of conventional Christian and paranormal belief systems.

DATA AND METHODS

The data used in this study are from the first (2005) wave of the BRS developed by the Department of Sociology and the Institute for the Study of Religion at Baylor University. Although it contains questions on a variety of topics, the majority of the fixed content of the BRS is devoted to religion items. The BRS was administered by the Gallup Organization using a mixed-mode method. The final sample size was 1,721. For details about the methodology of the survey and how it compares to other national surveys, see Bader, et al. (2007).

The analysis is divided into two sections. In the first section we provide frequencies and a principal components factor analysis on the conventional Christian and paranormal belief items. The factor analysis will answer two basic questions: (1) to what extent are there distinct sets of supernatural beliefs, and (2) are the belief sets related to one another? If there are distinct sets of supernatural beliefs, then the factor analysis should reveal distinct factor structures. The second part of the analysis is a regression analysis using key demographic measures, religiosity indicators, and an index of conventional Christian beliefs to predict paranormal beliefs.

Demographic Variables

The empirical findings in the field grounded in deprivation/marginalization theory indicate that socioeconomic status (education, income) will have a negative effect on supernatural beliefs (Hirschi 1969; Stark and Bainbridge 1987; Goode 2000; Mears and Ellison 2000; Orenstein 2002). Higher status actors will participate in religious organizations at a greater rate because they have access to the rewards that these institutions provide. However, to the extent that religious beliefs become compensators for the lack of material success in this world, there will be a negative relationship between beliefs and social class (Stark and Bainbridge 1985; Stark 1996). To the extent education represents development of rational (critical reasoning skills), there should be a strong negative relationship between education and paranormal beliefs (Krull and McKibben 2006).

However, some theoretical work suggests that the New Age is the province of elites and those who report no religious beliefs on surveys (Bainbridge and Stark 1980, 1981; Stark and Bainbridge 1985; Brown 1992). Such a perspective argues that higher education may lead people to reject traditional religious ideas in favor of the unconventional, while higher levels of income provide the resources for such experimentation (Lewis 1992). We control for education and income in the analysis.

Those who live on the margins of society and have loose bonds to primary groups may eschew conventional standards and be more inclined to believe in supernatural phenomenon (Hirschi 1969; Wuthnow 1978; Orenstein 2002). Demographically, marginalized groups may include those divorced or not married, racial (ethnic minorities), and females (in addition to those with less education and income). Moreover, the literature reviewed above indicates that demographic effects on paranormal beliefs vary considerably from study to study. We expect to add to this on-going debate with this analysis.

The demographic variables in this analysis include: age (in years), female dummy variable, whether or not the respondent is currently divorced (dummy), whether or not the respondent currently has a job for pay (dummy), education (range 1–7: highest grade completed: eighth or less; 9–12th no diploma, high school graduate, some college), trade (technical) [vocational training, college graduate, postgraduate work (degree)], income (range 1–7; \$10,000 or less, \$10,001–\$20,000, \$20,001–\$35,000, \$35,001–\$50,000, \$50,001–\$100,000, \$100,001–\$150,000, \$150,000 or more). We also control for whether or not the respondent lives in a Western state. Western states have the lowest

levels of traditional Christian beliefs in national samples (Bainbridge and Stark 1980; Goode 2000).

Religiosity Measures

Previous research notes the role of church attendance in inhibiting beliefs contrary to church teachings (MacDonald 1995; Sherkat and Wilson 1995; Sparks 2001; Orenstein 2002). As Mears and Ellison (2000:295) note, those who attend church more consistently will “receive more frequent exposure to the doctrines and assumptions of those groups.” To the extent that the doctrines of a religious group are at odds with supernatural beliefs or practices, frequent exposure should reduce supernatural beliefs and experiences (Iannaccone 1995). Non-Christian beliefs should be less prevalent among evangelical Protestants (Ellison 1995; Goode 2000; Orenstein 2002) who practice religious faith in contexts of higher levels of tension and those who attend church very often (McKinnon 2003; Glendinning 2006; Krull and McKibben 2006).

There are three religiosity measures in this analysis. The first is how often the individual attends church (range 0–8: never, less than once a year, once or twice a year, several times a year, once a month, 2–3 times a month, about weekly, weekly, several times a week). We also have a system of dummy variables from Steensland, et al.’s (2000) RELTRAD coding system: Evangelical Protestant, Roman Catholic, Black Protestant, Jewish, Mainline Protestant, other religion, and reports no religion. Evangelical Protestants are the suppressed category in the analysis. Finally, the analysis includes a measure of Biblical literalism (range 1–4): Which one statement comes closest to your personal beliefs about the Bible? (A) The Bible means exactly what it says. It should be taken literally, word-for-word on all subjects; (B) The Bible is perfectly true, but it should not be taken literally, word-for-word. We must interpret its meaning; (C) The Bible contains some human error; (D) The Bible is an ancient book of history and legends. We recode this variable such that a high value represents the most literal interpretation. Table 1 presents weighted means and standard deviations for all variables in the analysis.

Conventional Christian and Paranormal Belief Indices

Although we do not possess enough measures in the BRS to validate dimensions of the Paranormal Belief Scale developed by Tobacyk and Milford (1983), we agree with them that there are set patterns in paranormal beliefs and that they cluster together. In the first phase of the analysis we examine five conventional Christian belief items, and 11 paranormal belief items, with principal components

TABLE 1
Weighted Means and Standard Deviations of Independent and Dependent Variables

Demographics	Mean	Std. dev.
Education	4.58	1.6
Income	4.16	1.59
Age	49.84	16.54
Female	0.523	0.499
White	0.844	0.362
Divorced	0.142	0.349
Not working	0.373	0.483
East	0.226	0.418
South	0.302	0.459
West	0.226	0.418
Midwest	0.244	0.429
<i>Religiosity measures</i>		
Evangelical Protestant	0.318	0.465
Roman Catholic	0.205	0.404
Black Protestant	0.047	0.212
Mainline Protestant	0.211	0.408
Jewish	0.025	0.158
Other	0.045	0.209
No religion	0.112	0.316
Literal biblical interpretation	2.64	1.07
Church attendance	4.84	2.88
Conventional Christian beliefs (range: 5–22)	19.42	4.14
Paranormal beliefs (range: 7–35)	17.57	5.88

Source: 2005 Baylor Religion Survey.

factor analysis (varimax rotation) to locate potential belief clusters in the BRS data.

We present two factors in tables 2 and 3. The first factor represents our conventional Christian belief dimension and includes the five indicators found in table 2. It has a Cronbach's alpha value of 0.938 and an Eigenvalue of 6.3. These items—belief in God, heaven, hell, and belief that Jesus is the son of God—are conventional Christian beliefs.³

³In contrast, nonconventional or fundamentalist religious beliefs would include belief in Armageddon, the Rapture, demons, etc.

TABLE 2

Cell Percentages and Factor Loadings for Conventional Christian Belief Index Items (Chronbach's Alpha = 0.938; Eigenvalue = 6.23)

Items	Percent Responding
<i>Which one statement comes closest to your personal beliefs about God? (factor loading = 0.786)</i>	
I do not believe in anything beyond the physical world	4.7
I believe in a higher power or cosmic force	14.7
I sometimes believe in God	1.8
I believe in God, but with some doubts	11.1
I have no doubts that God exists	67.7
<i>Which one statement comes closest to your personal beliefs about Jesus? (factor loading = 0.799)</i>	
Jesus is a fictional character	1.1
Jesus probably existed, but he was not special	3.5
Jesus was an extraordinary person, but he was not a messenger of God	8.4
Jesus was one of many messengers or prophets of God	12.8
Jesus is the son of God	74.3
<i>In your opinion, does heaven exist (factor loading = 0.885)</i>	
Absolutely	66.5
Probably	17.4
Probably not	9.8
Absolutely not	6.3
<i>In your opinion, does hell exist (factor loading = 0.791)</i>	
Absolutely	55.6
Probably	17.9
Probably not	17.2
Absolutely not	9.2
<i>In your opinion, does God exist (factor loading = 0.86)</i>	
Absolutely	75.3
Probably	13.7
Probably not	6.9
Absolutely not	4.2

The second factor represents our paranormal belief dimension and includes the seven indicators presented in table 3 (four of the 11 initial items did not load well with these and other beliefs were dropped). It has a Cronbach's alpha value of 0.85 and an Eigenvalue of 3.82. In 1996

TABLE 3
 Cell Percentages and Factor Loadings for Paranormal Beliefs Index Items
 (Cronbach's Alpha = 0.853, Eigenvalue = 3.82)

Item	Percent Responding
<i>Astrologers, palm-readers, tarot card readers, fortune tellers, and psychics can foresee the future (factor loading = 0.799)</i>	
Strongly agree	1.5
Agree	24.7
Undecided	21.8
Disagree	35.5
Strongly disagree	36.9
<i>Astrology impacts one's life and personality (factor loading = 0.745)</i>	
Strongly agree	2.1
Agree	13.0
Undecided	14.0
Disagree	35.9
Strongly disagree	34.8
<i>It is possible to communicate with the dead (factor loading = 0.843)</i>	
Strongly agree	3.2
Agree	17.7
Undecided	18.5
Disagree	29.5
Strongly disagree	31.1
<i>Places can be haunted (factor loading = 0.785)</i>	
Strongly agree	6.5
Agree	32.7
Undecided	15.3
Disagree	24.9
Strongly disagree	20.7
<i>Dreams sometimes foretell the future or reveal hidden truths (factor loading = 0.557)</i>	
Strongly agree	10.1
Agree	44.5
Undecided	15.8
Disagree	18.6
Strongly disagree	10.9

Continued

TABLE 3
Continued

Item	Percent Responding
<i>Some UFOs are probably spaceships from other worlds (factor loading = 0.566)</i>	
Strongly agree	4.8
Agree	21.2
Undecided	27.0
Disagree	23.6
Strongly disagree	23.3
<i>Creatures such as Bigfoot and the Loch Ness Monster will one day be discovered by science (factor loading = 0.528)</i>	
Strongly agree	3.4
Agree	15.4
Undecided	25.9
Disagree	31.9
Strongly disagree	23.3

Gallup released a survey on paranormal beliefs (see Goode 2000). Our data indicate a generally stable level of paranormal beliefs over time. In the BRS, 38 percent of those surveyed in 2005 either strongly agree or agree with the statement that places can be haunted. In the 1996 Gallup survey, 33 percent believed that houses can be haunted. In the BRS, more than 20 percent agree or strongly agree that it is possible to communicate with the dead, while in the 1996 Gallup survey 20 percent reported the possibility of mental communication with the dead. In the 1996 Gallup survey, 25 percent believed in astrology, while in the 2005 BRS 26.2 percent agree or strongly agree that astrologers, palm-readers, tarot card readers, fortune tellers, and psychics can foresee the future.

Given the high Cronbach's alpha values for the two-factor structures, we create two indices, a conventional Christian belief index and a paranormal belief index. The high alpha scores indicate that each item has a near equal effect or weight, so an additive transformation is acceptable in creating these indices. There is a nonsignificant zero-order correlation of 0.03 between the two indices, which fails to support the prediction in Hypothesis 1 of a negative relationship between conventional Christian and paranormal beliefs (deprivation/marginalization hypothesis) and the prediction in Hypothesis 2 of a

positive relationship between them (small step hypothesis). Rather, the two types of belief clusters seem to occupy independent territories in the religious market (Stark and Bainbridge 1980; Hess 1993).

RESULTS

The second part of this analysis is a series of ordinary least squares (OLS) regression models in which the three hypotheses presented above are tested. Table 4 presents four models. In Model 1, we directly test Hypotheses 1 and 2 by examining the direct effects of conventional Christian beliefs on paranormal beliefs while controlling for key demographic and religiosity measures.⁴ Once we control for demographic and religiosity measures, our earlier finding of no zero-order correlation gives way to a strong positive relationship between the two. This finding is consistent with the arguments of Orenstein (2002), Rudski (2003), and Goode (2000) that conventional supernatural beliefs are associated with greater paranormal beliefs. The two belief patterns are not in a mutually exclusive relationship (see also Laubach 2004), though the relationship emerges only after many other factors are controlled.

Among the demographic measures, there is significant support for the marginalization thesis. Those with higher levels of education and income are significantly less likely to report strong paranormal beliefs. Also, older and white respondents report lower levels of paranormal belief than do younger and nonwhite respondents. These findings are consistent with deprivation and marginalization arguments presented by others (Wuthnow 1978; Stark and Bainbridge 1987; Orenstein 2002). Moreover, females are statistically more likely than males to report beliefs in paranormal phenomenon. This is not a surprising finding. As Mears and Ellison (2000) report, women are, in general, more religious and spiritual than men on all measures. Spirituality may be perceived as a form of femininity; therefore, women will be more likely to embrace paranormal beliefs.

The analysis shows that two religiosity measures have predicted effects on paranormal beliefs. Church attendance has a significant negative effect on paranormal beliefs. The same finding applies to Biblical literalism. Roman Catholics and mainline Protestants are more likely than evangelical Protestants to report paranormal beliefs. Those

⁴The causal direction is drawn from conventional Christian to paranormal beliefs. The small step hypothesis predicts that direction.

TABLE 4

Unstandardized Coefficients for the OLS Regression of Paranormal Beliefs on Conventional Christian Beliefs, Demographic, and Religiosity Measures (Standard Errors in Parentheses) $N = 1,301$

Variables	Model 1	Model 2	Model 3	Model 4
Intercept	21.91*** (1.37)	26.08*** (1.12)	24.56*** (1.01)	25.03*** (1.01)
<i>Demographics</i>				
Education	-0.217* (0.103)	-0.228* (0.103)	-0.18 (1.03)	-0.185 (0.103)
Income	-0.49*** (0.108)	-0.478*** (0.107)	-0.489*** (0.107)	-0.471*** (0.107)
Age	-0.04*** (0.01)	-0.038*** (0.01)	-0.041*** (0.01)	-0.038*** (0.01)
Female	2.1*** (0.301)	2.07*** (0.299)	2.16*** (0.301)	2.17*** (0.298)
White	-2.34*** (0.492)	-2.32*** (0.489)	-2.21*** (0.498)	-2.21*** (0.494)
Divorced	0.547 (0.45)	0.577 (0.447)	0.49 (0.448)	0.511 (0.444)
Not working	-0.438 (0.356)	-0.472 (0.352)	-0.474 (0.355)	-0.559 (0.352)
East	0.515 (0.445)	0.484 (0.484)	0.521 (0.444)	0.455 (0.441)
South	-0.099 (0.421)	-0.132 (0.418)	-0.095 (0.421)	-0.179 (0.418)
Midwest	0.158 (0.432)	0.122 (0.429)	0.079 (0.432)	0.013 (0.429)
<i>Religiosity measures</i>				
Roman Catholic	2.18*** (0.431)	2.03*** (0.429)	1.51** (0.457)	1.25** (0.456)
Black Protestant	-1.22*** (0.891)	-1.13 (.885)	-2.19 (1.28)	-2.24 (1.27)
Mainline Protestant	1.91*** (0.411)	1.67*** (0.412)	1.39*** (0.427)	1.05* (0.429)
Jewish	1.44 (1.08)	0.748 (1.09)	1.84 (1.36)	1.27 (1.36)
Other	3.68*** (0.701)	3.48*** (0.697)	3.26*** (0.725)	3.03*** (0.721)
No religion	-0.692 (0.659)	0.194 (0.691)	-0.876 (0.837)	-0.767 (0.831)
Literal interpretation	-1.26*** (0.209)	-1.19*** (0.208)	-1.16*** (0.211)	-1.12*** (0.21)
Church attendance	-0.536*** (0.063)	-0.424*** (0.068)	-0.525*** (0.063)	-0.387*** (0.068)
Conventional Christian beliefs	0.339*** (0.058)	0.165* (0.071)	0.013 (0.098)	-0.185 (0.105)
Christian beliefs × Attendance		-0.077*** (0.018)		-0.098*** (0.02)
Christian beliefs × Main Protestant			0.447*** (0.128)	0.529*** (0.128)
Christian beliefs × Catholics			0.545*** (0.145)	0.587*** (0.144)
Christian beliefs × Black Protestants			0.546 (0.424)	0.607 (0.421)
Christian beliefs × Jewish			0.545* (0.243)	0.616* (0.242)
Christian beliefs × Other			0.323 (0.18)	0.349 (0.178)
Christian beliefs × No religion			0.344*** (0.121)	0.195 (0.124)
R-square	0.243	0.253	0.268	0.269

Note: The interaction variables are centered in this analysis so the interpretations are conditioned at the mean of the respective variables, as opposed to absolute zero (Aiken and West 1991). In addition, since church participation is often over-reported on surveys (Krull and McKibben 2006), we reestimate the slopes of conventional Christian beliefs on paranormal beliefs at the mean and plus/minus one standard deviation.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests)

who report no religion are no less likely than evangelical Protestants to report beliefs in paranormal phenomena. This finding is consistent with the idea that religious “nones” are rationalist/materialist in the two spheres approach (Goode 2000). This finding is at odds with data presented by Bainbridge and Stark (1980, 1981) that the “nones” are the experimenters and would have higher levels of paranormal beliefs. Yet these findings are concordant with the argument of Orenstein (2002), whose analysis did not show any supportive evidence for a hypothesis that people with no religious affiliation are more likely to endorse paranormal beliefs.

The compatibility hypothesis proposes that two measures of tension—church attendance, and belonging to an evangelical protestant tradition—will affect the relationship between conventional Christian and paranormal beliefs. We test this hypothesis and find that both church attendance and religious tradition moderate the effects of conventional Christian beliefs on paranormal experiences. In Model 2 we present the interaction effect of conventional Christian beliefs and church attendance. At average levels of church attendance, conventional Christian beliefs have a modest, positive effect on paranormal beliefs. At below average levels of church attendance, conventional Christian beliefs have a steeper positive effect on paranormal beliefs. At above average levels of church attendance, there is a modest negative effect of conventional Christian beliefs on paranormal beliefs. The inclusion of this interaction does not affect the relationships between demographic and religiosity measures on paranormal beliefs.

Model 3 in table 4 shows the interaction of conventional Christian beliefs by religious tradition. These results show that at average levels of conventional Christian beliefs, both Catholics and mainline Protestants have higher levels of paranormal beliefs than do evangelical Protestants. Moreover, the effects of conventional Christian beliefs are positive for both Catholics ($b = 0.545$) and mainline Protestants ($b = 0.447$); the stronger the Christian beliefs, the stronger the paranormal beliefs. In Model 3 conventional Christian beliefs have no significant effect. Given that this is an interaction model, the coefficient for conventional Christian beliefs ($b = 0.013$) is the effect of conventional Christian beliefs for evangelical Protestants (see Aiken and West 1991). Among evangelical Protestants, conventional Christian beliefs do not affect paranormal beliefs.

Model 4 presents a regression with both sets of interactions simultaneously and shows that both sets are still significant when all are included in the model. Net of the effects of religious tradition, church

attendance moderates the effects of conventional Christian beliefs on paranormal beliefs. Furthermore, conventional Christian beliefs have a positive effect on paranormal beliefs for two religious traditions: main-line Protestants and Catholics.

Among evangelical Protestants, there is no direct, or nonadditive, effect of conventional Christian beliefs on paranormal beliefs. We followed up the regression analysis by estimating Model 1 just for evangelical Protestants. We were curious as to what factors affected their paranormal beliefs. One variable stood out from the others: church attendance (Supplementary Table 1).

CONCLUSION

In this study we presented three hypotheses to frame an analysis of the relationship between conventional Christian and paranormal beliefs. Our analysis fails to support *directly* the marginalization/deprivation hypothesis, which predicts a negative effect between the two. We did find that many established demographic predictors of nonconventional beliefs (SES, gender, race, and age) have expected effects. However, the bivariate relationship between conventional Christian and paranormal beliefs is not significant. We find more support for the small step hypothesis, which predicts a positive effect between conventional Christian and paranormal beliefs. The premise of such a relationship is that conventional Christian beliefs and paranormal beliefs are part of the spiritual realm and, as such, those who believe in one should be likely to believe in the other. However, the lack of any bivariate relationship between them indicates that there are some indirect or circumstantial processes at work.

We presented a third hypothesis, the compatibility hypothesis, to reconcile the first two. We proposed that conventional Christian and paranormal beliefs would be more compatible in situations where there is less opposition to such beliefs. Previously it was argued that church attendance reinforces the veracity and exclusiveness of conventional Christian beliefs, and the deceit of paranormal beliefs (Mears and Ellison 2000; Rice 2002; Bainbridge 2004). Holding conventional Christian views but not practicing the faith via regular church attendance leaves one less exposed to religious tension and more likely to make that “small step” to paranormal beliefs through diversification of the religious portfolio (Stark and Bainbridge 1985; McKinnon 2003; Glendinning 2006). Similarly, we maintained that having an

evangelical Protestant religious affiliation makes an individual a member of a voluntary organization that seeks to keep secular culture at arm's length (Sherkat and Wilson 1995; Stark and Bainbridge 1985; MacDonald 1995; Steensland, et al. 2000).

We find support for the compatibility hypothesis. Both church attendance and religious tradition moderate the effects of conventional Christian beliefs on paranormal beliefs. Among those who have above average church attendance (in our sample, those who report going to church about weekly), the stronger their conventional Christian beliefs, the less likely they are to have paranormal beliefs. We maintain that this interaction effect is present because going to church often reinforces the veracity and exclusiveness of conventional Christian beliefs, and the deceit of paranormal beliefs (Bainbridge 2004).

The interactions for religious tradition show that mainline Protestants and Catholics are more likely to believe in the paranormal, and also that conventional Christian beliefs have strong, positive effects on paranormal beliefs within these two traditions. It is not surprising that more devout Catholics are prone to the paranormal (see Schwebel 2004). It is a religious tradition with many paranormal elements, such as angels and belief in miraculous healings (for example, the Madonna of Medjugorje). For Catholics, it may be a small step from one form of spiritualism to another. However, mainline Protestants better resemble the compatibility hypothesis in the portfolio diversification framework. Because mainline Protestants are at lower levels of tension with secular culture than evangelical Protestants (see Steensland, et al. 2000), they are more able to hold a diversity of religious beliefs, both Christian and paranormal.

The reader must keep in mind, however, that this is a preliminary attempt to reconcile two competing theories (see also McKinnon 2003; Bainbridge 2004; Krull and McKibben 2006). While our data are suggestive of the moderating effects of religious tension and compatibility, more direct measures of social control related to congregational life are needed to test more completely this theory as it relates to the relationship between conventional Christian beliefs and the paranormal. Moreover, this line of research would benefit from extensions to paranormal experiences (see Laubach 2004) and paranormal/New Age consumption (Mears and Ellison 2000). Furthermore, additional studies that examine the relationships among different levels of religious tension, perhaps with fundamentalist Christian beliefs (for example, dispensational beliefs in Armageddon) and connection to the paranormal would help to provide a clearer picture of this complicated relationship.

Our study has other implications for research in this field. Our factor analysis confirms that conventional and classic paranormal beliefs fall into two distinct clusters. Previous research has debated how many paranormal dimensions exist (for example, Tobyack and Milford 1983; Lawrence 1995; Bainbridge 2004). Our data do not provide the final word on this matter. However, in our factor analysis we found one paranormal dimension that included seven of the 11 items we analyzed. More significantly, unlike Bainbridge (2004) in his nonrandom sample, we find that the alien/UFO indicator loads well with other paranormal items (psychics, astrologers, and hauntings). While some studies have empirically treated conventional Christian and paranormal beliefs as two distinct latent constructs (see Orenstein 2002; McKinnon 2003), others have used the observed variables as individual measures (Rice 2003; Laubach 2004; Krull and McKibben 2006). Our analysis shows two distinct latent constructs. The paranormal belief category is not a conceptual “catch all” for non-Christian belief. Those who believe in one phenomenon tend to believe in many.

Second, the negative relationships between SES measures (education/income) and paranormal beliefs are inconsistent with arguments that propose that such beliefs are the province of elites (Stark and Bainbridge 1985). Proponents of this argument link the rise of New Age religions and greater acceptance of classic supernatural beliefs to cultural shifts during the 1960s (Brown 1992; Orenstein 2002). What began with the decline of traditional Christian beliefs on elite campuses (Wuthnow 1978) spread into a counter-cultural movement that still draws largely from a more free-thinking segment of society (Brown 1992). However, our results show that the wealthiest and best educated are the least likely to report beliefs in the paranormal. Perhaps the elite argument might apply more readily to consumption of New Age and related materials [although Mears and Ellison (2000) fail to document such a relationship]. But in terms of beliefs, we find no support for this argument.

Third, previous research was conducted with a mix of methodologies and samples with many limitations (see Rice 2003). Rudski's (2003) analysis is confined to varimax rotation and a two-tailed *t*-test using a sample of 170 undergraduate students. Goode (2000) also uses a sample of undergraduate students (see also Krull and McKibben 2006), while Wuthnow's (1978) dated sample was drawn exclusively from the San Francisco Bay Area. In a closely related study of New Age consumption, Mears and Ellison (2000) use a random sample from Texas. Two of the national polls in the literature are from

Canada (Orenstein 2002; McKinnon 2003) and Scotland (Glendinning 2006).

Where our study is most comparable is Rice's (2003) analysis using the 1998 Southern Focus Poll. We maintain that our analysis advances his study both empirically and theoretically. Empirically, we have additional religiosity measures not available in the 1998 Southern Focus Poll, including church attendance and religious tradition. As we have shown, these are important predictors of paranormal beliefs. Second, we advance this previous work theoretically by incorporating the concept of compatibility, and its related issues of tension, stigma, and sacrifice. We maintain that the moderating effects of church attendance and religious tradition best predict whether the relationship between conventional Christian and paranormal beliefs will be positive or negative.

While numerous studies have examined the relationship between supernatural beliefs associated with Christianity and other paranormal beliefs, this previous research has been unable to provide a conclusive answer to a simple question: Are these two realms of belief related and, if so, in what way? Do beliefs associated with mainstream Christianity preclude belief in psychic phenomena and other supernatural phenomena? Our analysis suggests that the key to understanding this relationship is to focus on those characteristics of the setting of religious consumption, and how those characteristics condition the compatibility of the two sets of beliefs.

SUPPLEMENTARY DATA

Supplementary Table 1 is available online at *Sociology of Religion* online (http://www.oxfordjournals.org/our_journals/socrel/).

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